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In re application: Mello
Serial No.: 09/818,016
Filed: 3/26/2001
Group Art Unit: 3623
Examiner: Van Doren, Beth
For: SYSTEM FOR REMOTELY MANAGING ELEVATOR
MECHANIC SERVICE ROUTINE

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Appellant now submits its brief after having filed a Notice of Appeal on November 8, 2005. A check in the amount of \$500.00 is enclosed to cover the associated fee. The Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees or credit the account for any overpayment.

Introduction

The §103 rejections should be reversed because there is no *prima facie* case of obviousness. There must be some motivation for making a combination of references that comes from within the art. When there is no benefit provided to an arrangement in a primary reference when adding a feature from a second reference, there is no motivation for making the combination and no *prima facie* case of obviousness. An applicant's claims and disclosure

cannot be used as a source of suggestion or a roadmap for how to piece together selected portions of the prior art when attempting to establish a *prima facie* case of obviousness. In this case, the Examiner's proposed combination does not provide any benefit within the context of the teachings of the base reference of the proposed combination and only Applicant's disclosure explains how there could be any motivation for making the combination.

Real Party in Interest

Otis Elevator Company, which is the Assignee of this application, is the real party in interest. Otis Elevator Company is a business unit of United Technologies Corporation.

Related Appeals and Interferences

There are no related appeals or interferences.

Status of the Claims

Claims 1-8, 10, 12-16, 18 and 20 are on appeal. Claims 11 and 19 were previously cancelled. Claims 9 and 17 are cancelled by an Amendment submitted concurrently with this brief.

The claims on appeal stand rejected under 35 U.S.C. §103.

Status of Amendments

Applicant wishes to cancel claims 9 and 17 rather than appealing the rejection of those claims at this time. Applicant is submitting an amendment to cancel those two claims concurrently with submitting this brief. There are no other unentered amendments.

Summary of Claimed Subject Matter

This invention generally relates to assisting an elevator mechanic at managing daily activities and completing work assignments.

Independent claim 1 recites:

1. A system for automatically and remotely assisting an elevator mechanic, comprising:
 - a planning module that automatically plans out a recommended list of tasks for the mechanic to complete during a workday;
 - an information module that automatically provides the mechanic information regarding items associated with the recommended routine;
 - a communication module that facilitates communication between the mechanic and a base location for providing the mechanic an indication of a special service request, for allowing the mechanic to selectively accept an assignment of the special service request and for allowing the mechanic to communicate whether the mechanic accepts the assignment to the base location; and
 - a portable mechanic interface that is operative to allow the mechanic to remotely access information from or provide information to the planning, information and communication modules, respectively.

One example arrangement that claim 1 reads upon is schematically shown in Figures 1 and 2. The various modules recited in claim 1 are schematically shown in Figure 2 while the portable mechanic interface is schematically shown at 24 in Figure 1. One aspect of the claimed communication module is that it provides a mechanic an indication of a special service request and allows the mechanic to selectively accept an assignment of the special service request. One example embodiment is described in paragraph 29 of the specification where the interface device 24 provides an indicator (visual or audible) to the mechanic each time that a priority customer call is placed. In one example, the interface device 24 sounds an alarm and prompts the mechanic to accept or reject the particular call. If the mechanic accepts it, the device 24 is capable of providing a brief assessment of the situation to the mechanic so that the mechanic is able to determine whether immediate attention is required for that particular service call.

Claim 4 includes:

4. The system of claim 2, including a status module that maintains information regarding a status of a task, the status module periodically updating the status of a task responsive to information from the tracking device.

In one embodiment upon which claim 4 reads, upon arrival at the site, the system preferably updates the status of the corresponding customer request automatically based upon location information regarding the locator device 36, which is part of the portable interface 24 in the illustrated example.

Independent claim 12 recites:

12. A system for automatically and remotely assisting an elevator mechanic, comprising:

- a planning module that automatically plans out a recommended list of tasks for the mechanic to complete during a workday;

- an information module that automatically provides the mechanic information regarding items associated with the recommended routine;

- a communication module that facilitates communication between the mechanic and a base location, the communication module automatically generates billing information regarding a task completed by the mechanic; and

- a portable mechanic interface that is operative to allow the mechanic to remotely access information from or provide information to at least one of the planning, information and communication modules

One feature of the communication module of claim 12 is that it automatically generates billing information regarding a task completed by the mechanic. One example embodiment upon which claim 12 reads is described in paragraph 25 of the specification. In that example, at the end of a task, the mechanic 22 can use the interface device 24 to close out the task. The example system 20 automatically calculates travel time and work time and presents that information to the mechanic in the form of a time ticket that is reviewed and approved (or altered if necessary) by the mechanic using the interface device 24. The example system 20 also allows the mechanic to enter expenses to account for parts that were utilized, for example.

Independent claim 13 recites:

13. A method of automatically and remotely assisting an elevator mechanic, comprising the steps of:

(A) automatically planning out a recommended list of tasks for the mechanic to complete during a workday including selectively providing the mechanic an indication of a special service request;

(B) automatically providing the mechanic information regarding items associated with the recommended routine responsive to an inquiry from the mechanic;

(C) facilitating remote communication between the mechanic and a base location whereby the mechanic is able to access information regarding the recommended list of step (A) and the information of step (B); and

(D) determining whether the mechanic accepts an assignment of the special service request.

The first and last steps listed in claim 13 relate to an assignment of a special request to a mechanic. The example from the specification upon which claim 13 reads was described in connection with claim 1 above.

Independent claim 20 recites:

20. A method of automatically and remotely assisting an elevator mechanic, comprising the steps of:

(A) automatically planning out a recommended list of tasks for the mechanic to complete during a workday;

(B) automatically providing the mechanic information regarding items associated with the recommended routine responsive to an inquiry from the mechanic;

(C) facilitating remote communication between the mechanic and a base location whereby the mechanic is able to access information regarding the recommended list of step (A) and the information of step (B); and

(D) automatically generating billing information regarding a task completed by the mechanic.

The last step listed in claim 20 includes automatically generating billing information. An example embodiment upon which claim 20 reads was described in connection with claim 12 above.

Grounds of Rejection to be Reviewed on Appeal

Claims 1-8 and 10 were rejected under 35 U.S.C. §103 based upon the proposed combination of United States Patent Nos. 6,578,005 and 4,922,514 (the *Lesaint, et al.* and *Bergeron, et al.* references).

Claims 12-16, 18 and 20 were rejected under 35 U.S.C. §103 based upon United States Patent No. 6,578,005 (the *Lesaint, et al.* reference).

Argument

None of the claims are obvious because the motivation required under 35 U.S.C. §103 for modifying the *Lesaint, et al.*, reference as proposed by the Examiner does not exist. Applicant's own teachings cannot provide the motivation for modifying the reference when attempting to establish a *prima facie* case of obviousness. Applicant's claims and disclosure cannot be used as a roadmap for piecing together selected portions of references in an attempt to establish a *prima facie* case of obviousness.

When considering whether there is motivation for making the modification to a base reference within a proposed combination under 35 U.S.C. §103, it is important to consider what the teachings of that base reference are in order to determine whether there is any motivation for making the proposed modification. Where there is no benefit to making a proposed modification, the legally required motivation to establish a *prima facie* case is absent.

It is important to note that the *Lesaint, et al.* reference is primarily concerned with a scheduling algorithm. That reference deals with setting up schedules for service personnel in a particular manner to achieve particular objectives. When the Examiner proposes to modify the teachings of *Lesaint, et al.* to incorporate additional features, there is no benefit to doing that

because it does not enhance, in any way, the scheduling algorithm or technique of *Lesaint, et al.*'s teachings. Additionally, the proposed modifications to *Lesaint, et al.* (e.g., incorporating features of Applicant's claimed invention) do not in any way facilitate achieving the objectives stated in the *Lesaint, et al.* reference. In other words, there is no teaching or suggestion from within the references for making the Examiner's proposed combination.

It is important to note that the *Lesaint, et al.* reference is concerned primarily with a rule based and stochastic scheduling algorithm for efficiently distributing tasks based on available resources. The way in which that algorithm operates is not in any way enhanced by incorporating the teachings from the *Bergeron, et al.* reference relied upon by the Examiner when attempting to establish a *prima facie* case of obviousness against claims 1-8 and 10. Adding a rejection or acceptance feature from the *Bergeron, et al.* reference does not provide any benefit to the arrangement in the *Lesaint, et al.* reference because it does not make that system any more efficient to reach its intended objectives. In fact, it appears at least somewhat contrary to the intentions of the *Lesaint, et al.* reference. *Lesaint, et al.* assume that once an appropriate individual "reports in," (column 4, line 66) or "calls in," (column 5, line 22) that individual will be assigned the task in question. There is no discussion anywhere within the *Lesaint, et al.* reference about giving an individual the option of accepting or rejecting a task. That reference appears to prefer the arrangement described in that document to enhance the efficiencies of the scheduling algorithm.

Without some benefit extending from a proposed combination (absent Applicant's own teachings regarding making such an arrangement), there is no motivation and no *prima facie* case of obviousness. The rejection of claims 1-8 and 10 based upon the improper combination of *Lesaint, et al.* and *Bergeron, et al.* should be reversed.

Additionally, even if the combination could be made, the result is not the same as what is recited in claim 4. There is nothing in either reference or the proposed combination of them that updates a status of a task responsive to information from a tracking device as recited in claim 4. In paragraph 16 of the Final Office Action, the Examiner points to several portions of *Lesaint, et al.* allegedly teaching such an approach. None of those cited portions teach that. The closest is the teaching in column 11 at lines 10-30 but that does not teach that the status information is based upon information from a tracking device. Such a distinction is patentable and non-obvious in view of the teachings of *Lesaint, et al.* Automatically updating status information based upon tracking device information is not shown or suggested in either reference. There is no *prima facie* case of obviousness against claim 4, at a minimum.

Applicant respectfully submits that there is no *prima facie* case of obviousness against claims 12-16, 18 and 20 based upon the *Lesaint, et al.* reference. There is no suggestion whatsoever from within that reference for modifying it to make it consistent with what Applicant claims. It is improper hindsight to consider Applicant's disclosure and then determine whether it might be useful to make modifications to a reference to arrive at the same result. The Examiner is relying upon *Lesaint, et al.* alone to establish a *prima facie* case of obviousness, and therefore that reference must provide some suggestion or motivation for the modification proposed by the Examiner.

As mentioned above, that reference is primarily concerned with a particular scheduling technique that uses a rule based assignment of tasks initially and then a stochastic technique for dynamically updating schedules. That technique will not be improved or enhanced by modifying it to make it consistent with Applicant's claims. Therefore, no benefit flows from the proposed modification and there is no legal modification for making it.

With regard to claim 12, the Examiner properly acknowledges that *Lesaint, et al.* is void of any discussion of billing. To add an all new feature “by programming the system of *Lesaint, et al.* to generate the bill at the time service is rendered” as suggested by the Examiner, comes purely from the suggestion of Applicant’s teachings. Billing information will not in any way enhance the scheduling efficiency of *Lesaint, et al.*’s algorithm and, therefore, provides no benefit to that system. Applicant’s invention of claim 12 includes a feature that is not taught by the art and not fairly added to the art under the provisions of 35 U.S.C. §103. Claim 12 cannot be considered obvious over *Lesaint, et al.*

With regard to claim 13, the scheduling arrangement of *Lesaint, et al.* has no capacity for providing a mechanic information regarding items associated with a recommended routine responsive to an inquiry from the mechanic. There is no teaching of a mechanic using the *Lesaint, et al.* scheduling arrangement for making inquiries as recited in step (b) of claim 13, for example. The portions of *Lesaint, et al.* cited by the Examiner do not teach this.

Further, there is nothing within *Lesaint, et al.* that teaches or suggests determining whether an elevator mechanic accepts an assignment of a special service request. The Examiner properly acknowledges this in making the proposed combination with *Bergeron, et al.* in the rejection applied against claim 1, for example. In paragraph 25 of the Final Office Action, the Examiner appears to be taking a different position in stating that *Lesaint, et al.* somehow teaches determining whether a mechanic accepts an assignment. In any event, *Lesaint, et al.* assumes that a mechanic accepts an assignment given to it by the scheduling arrangement of *Lesaint, et al.* There is never any discussion within the document of giving the mechanic the freedom to accept or decline an assignment. Adding such a feature to *Lesaint, et al.* will not make that arrangement any more efficient in terms of scheduling out assignments to meet its intended objectives. There

is no motivation for modifying *Lesaint, et al.* in this manner and claim 13 cannot be considered obvious. *Lesaint, et al.* only teaches calling in or reporting in to request a new task (column 4, line 66, for example).

As discussed above, there cannot be a *prima facie* case of obviousness against a claim that includes a special service request acceptance or refusal by a mechanic. Therefore, there is an independently dispositive reason why there is no *prima facie* case against claim 13. Modifying *Lesaint, et al.* to make it consistent with claim 13 would go contrary to the teachings of that reference, which is not permissible under 35 U.S.C. §103.

Additionally, there is nothing within *Lesaint, et al.* that suggests automatically providing a mechanic information regarding items associated with a recommended routine responsive to an inquiry from the mechanic as recited in claim 13. The scheduling technique of *Lesaint, et al.* does not include any capacity for doing so.

Regarding claim 15, there is nothing in *Lesaint, et al.* that includes updating a status of a task based upon location information as claimed. Applicant respectfully disagrees with the Examiner's conclusion that *Lesaint, et al.* teaches such an approach.

With regard to claim 20, Applicant has already discussed why it is improper to modify *Lesaint, et al.* to include automated billing information. The teachings of that reference are purely concerned with scheduling. It cannot be considered obvious to add automatic billing to the scheduling arrangement of *Lesaint, et al.* Billing has nothing to do with setting the schedule for the tasks to be performed during a day, which is the primary concern of the *Lesaint, et al.* reference. Without any benefit flowing from the proposed modification, there is no motivation for making it and no *prima facie* case of obviousness. Applicant's disclosure and claims cannot

be used as a basis for hindsight reasoning suggesting how to modify the prior art in an attempt to establish a *prima facie* case of obviousness.

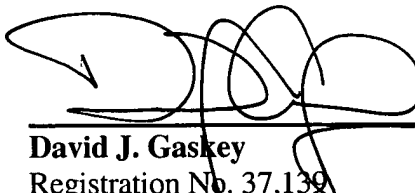
Further, Applicant respectfully disagrees that “these are all fee for service industries, requiring the client to pay for the services completed by a service provider, such as a field technician.” In many instances, a customer may not have to pay a fee upon completion of a task because there is a contract regarding such services that already covers such services. The Examiner had to provide some proof regarding this feature and demonstrate how the teachings of an appropriate reference could be combined with *Lesaint, et al.* but did not.

CONCLUSION

There is no *prima facie* case of obviousness because there is no benefit provided to the teachings of the *Lesaint, et al.* reference when making the modifications proposed by the Examiner. Without any benefit, the legally required motivation for establishing a *prima facie* case of obviousness under 35 U.S.C. §103 is absent. Additionally, as noted above, the limitations of several claims cannot be found in the proposed combinations even if it were possible to make them. None of Applicant’s claims can be considered obvious.

Respectfully submitted,

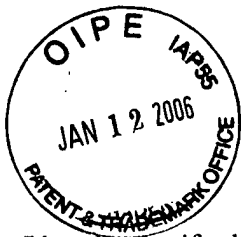
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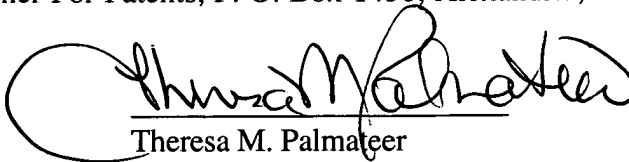
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Theresa M. Palmateer

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EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.

APPENDIX OF CLAIMS

1. A system for automatically and remotely assisting an elevator mechanic, comprising:

a planning module that automatically plans out a recommended list of tasks for the mechanic to complete during a workday;

an information module that automatically provides the mechanic information regarding items associated with the recommended routine;

a communication module that facilitates communication between the mechanic and a base location for providing the mechanic an indication of a special service request, for allowing the mechanic to selectively accept an assignment of the special service request and for allowing the mechanic to communicate whether the mechanic accepts the assignment to the base location;

and

a portable mechanic interface that is operative to allow the mechanic to remotely access information from or provide information to the planning, information and communication modules, respectively.
2. The system of claim 1, including a tracking device that automatically provides information regarding a location of the mechanic and wherein the planning module uses the location information.
3. The system of claim 2, wherein the tracking device is associated with the portable interface.

4. The system of claim 2, including a status module that maintains information regarding a status of a task, the status module periodically updating the status of a task responsive to information from the tracking device.
5. The system of claim 1, wherein the planning module provides information to the mechanic regarding a plurality of tasks to be performed, a recommended order in which to perform the tasks and information regarding a location where each task is to be performed.
6. The system of claim 5, including using location information regarding the tasks to determine the recommended order.
7. The system of claim 1, wherein the planning module is operative to provide a prioritized order of tasks to be completed during the workday.
8. The system of claim 7, wherein the planning module periodically updates the prioritized order of tasks.
9. (Cancelled)
10. The system of claim 1, wherein the communication module facilitates the mechanic providing a base location with information regarding a status of a task that the mechanic is undertaking.

11. (Cancelled)
12. A system for automatically and remotely assisting an elevator mechanic, comprising:
 - a planning module that automatically plans out a recommended list of tasks for the mechanic to complete during a workday;
 - an information module that automatically provides the mechanic information regarding items associated with the recommended routine;
 - a communication module that facilitates communication between the mechanic and a base location, the communication module automatically generates billing information regarding a task completed by the mechanic; and
 - a portable mechanic interface that is operative to allow the mechanic to remotely access information from or provide information to at least one of the planning, information and communication modules

13. A method of automatically and remotely assisting an elevator mechanic, comprising the steps of:

- (A) automatically planning out a recommended list of tasks for the mechanic to complete during a workday including selectively providing the mechanic an indication of a special service request;
- (B) automatically providing the mechanic information regarding items associated with the recommended routine responsive to an inquiry from the mechanic;
- (E) facilitating remote communication between the mechanic and a base location whereby the mechanic is able to access information regarding the recommended list of step (A) and the information of step (B); and
- (F) determining whether the mechanic accepts an assignment of the special service request.

14. The method of claim 13, including determining a location of the mechanic and wherein step (A) includes using information regarding the determined location.

15. The method of claim 14, including maintaining status information regarding a status of a task and periodically updating the status of a task using the determined location.

16. The method of claim 13, including assigning a priority level to the tasks of step (A) and automatically periodically updating the priority level.

17. (Cancelled)

18. The method of claim 13, including automatically processing information from the mechanic regarding a status of a task that the mechanic is undertaking.

19. (Cancelled)

20. A method of automatically and remotely assisting an elevator mechanic, comprising the steps of:

- (A) automatically planning out a recommended list of tasks for the mechanic to complete during a workday;
- (B) automatically providing the mechanic information regarding items associated with the recommended routine responsive to an inquiry from the mechanic;
- (C) facilitating remote communication between the mechanic and a base location whereby the mechanic is able to access information regarding the recommended list of step (A) and the information of step (B); and
- (D) automatically generating billing information regarding a task completed by the mechanic.